



April 2003

Protocol for West Nile Virus Dead Bird Surveillance

Dead birds testing positive for West Nile virus (WNV) are a sensitive indicator of viral activity in a geographical area. Various approaches for dead bird surveillance have been used by states where WNV outbreaks have occurred. These activities have ranged from reporting and testing only dead crows in some states to testing all bird species in other states.

Based on data from the past four years, selection of *Corvidae* species (includes jays, magpies, ravens and crows) or raptors will increase the probability of detecting WNV in our state. Dead bird surveillance across the country from 1999 to present showed the *Corvidae* family of birds to be very susceptible to the virus suffering a high level of mortality. Testing dead *Corvidae* species found in the state for WNV is important because of their high susceptibility to the virus. Raptor species are very susceptible to WNV and are considered a good indicator species as well as good candidates for testing.

During the 1999 to 2002 WNV outbreak, birds positive for WNV were more commonly found dead. The small percentage of sick birds observed showed the following clinical signs: weakness; lethargy; tremors; inability to walk, fly, perch or hold their wings normally against their body; and were easily approachable by humans. These signs of generalized illness are NOT unique to WNV infection. Birds positive for WNV were often in fair to poor physical condition with loss of fat and muscle mass particularly noticeable in the breast muscles.

Birds that die suddenly in numbers at the same location are more likely to have died from causes other than WNV. Such die-offs are frequently associated with pesticide or natural poisoning incidents. Birds associated with these die-offs are not considered suitable specimens for WNV surveillance. We recommend reporting bird die-offs to the Washington Department of Fish and Wildlife or United States Fish and Wildlife Service office in your area.

Submit **freshly dead** (less than 48 hours old) intact (not scavenged) bird carcasses. If the carcass has an odor, is soft and mushy, has skin discoloration, feathers or skin that easily rubs off, or has maggots present, it is too decomposed for testing. Birds may be frozen for storage and shipping.

This year testing is being done at the Washington Animal Disease Diagnostic Laboratory, Pullman, WA. The laboratory will test birds weekly and submit electronic reports to Washington State Department of Health. They will notify the department immediately by telephone of any positive birds. The department will regularly provide results to local health departments.

In addition to testing selected specimens, it is also necessary to record reports of dead birds that are **not** tested. There appears to be a significant correlation between areas with high *densities* of reports and areas where human cases appear one to four weeks later. Consider using the same form submitted with laboratory specimens to receive and record information about birds reported but not tested. Retain and map these reports to evaluate areas of heavier sighting activity.

Contact Tom Gibbs (360) 236-3060 or email tom.gibbs@doh.wa.gov if you have any questions.



2003 WNV Surveillance

INSTRUCTIONS FOR COLLECTING AND SHIPPING BIRDS TO THE WASHINGTON ANIMAL DISEASE DIAGNOSTIC LABORATORY FOR WEST NILE VIRUS EVALUATION

Please follow these instructions to collect and ship carcasses for West Nile virus testing to the Washington Animal Disease Diagnostic Laboratory (WADDL) to insure adequate and well-preserved specimens.

1. Collect freshly dead birds. Decomposed or scavenged carcasses are unacceptable. If the carcass has an odor, is soft and mushy, has skin discoloration, feathers or skin that easily rubs off, or has maggots present, it is too decomposed for testing. Ideally, collect a combination of freshly dead birds and birds that were euthanized after their behavior was observed and recorded.
2. Use rubber gloves when picking up sick or dead animals. If you do not have gloves, insert your hand into a plastic bag. Take a cooler containing ice into the field to immediately chill the carcasses.
3. Place each bird in a plastic bag with absorbent material (paper towel, etc.), seal, then place inside a second bag and seal (more than one individually bagged bird can be placed in the second bag). Double bagging carcasses prevents cross-contamination of individual specimens and leaking from shipping containers.
4. Complete a separate copy of the attached Dead Bird Reporting form for each bird. Place copies of the forms in an envelope and place inside of the shipping container. If more than one carcass is submitted, please include some type of identification information (perhaps numbering) on each one. We need to be able to match the samples to the corresponding form.
5. Ship specimens in a hard-sided plastic cooler. Stuff crumpled newspaper into any spaces between the sides of the box and cooler. **Hard-sided (plastic) coolers will be returned if you label with your name and address in permanent ink.**

Line the cooler with a plastic bag and pack the bagged carcasses in the cooler with enough **ice packs** to keep the carcasses cold. **Do not use wet ice**, which can leak during shipment. Place crumpled newspaper or similar absorbent material in the cooler to fill unused space, keep ice in contact with carcasses, provide insulation and absorb any liquids. Tape cooler or box shut with strapping tape.

Label coolers with: **Washington Animal Disease Diagnostic Laboratory
PO Box 2037 College Station/Bustad Hall, Room 155-N
Pullman, WA 99165-2037
(509) 335-9696**

Also include the words on the top of the cooler: DIAGNOSTIC SPECIMENS - WILDLIFE

6. For questions, contact Tom Gibbs, e-mail (tom.gibbs@doh.wa.gov), phone (360) 236-3060. Ship Monday through Thursday morning by overnight delivery service. Do not ship on Friday because the laboratory is closed on Saturday. If you cannot ship within 24 hours, freeze the bird(s).

Dead Bird Reporting

Internal Use State ID _____
County _____
Entry Date _____

Internal Use WADDL Log Information

Client

Washington State Department of Health
Office of Environmental Health & Safety
PO Box 47825
Olympia, WA 98504-7825

Submitter

Refer to Submitting Agency below

Case Number (place case number label here)

Submitter Please Complete This Section

Collection Location

Location Name _____

Physical Address _____

Address 2 _____

City/State _____

County _____

Zip Code _____

GPS Coordinate

Latitude (i.e., 47.198062) _____

Longitude (i.e., -122.386037) _____

(Please report your GPS coordinate in decimal degrees with a minimum of six decimal places.)

Location Description _____

Collection Date ____/____/____

Species of Bird Collected _____

Trauma Associated ☐ Unsure ☐ Yes ☐ No

FedEx Airbill # _____

Local ID _____

Submitting Agency

Name _____

Address _____

City/State/Zip _____

Contact Person _____

Phone _____

Fax _____

Email _____

Person Reporting Dead Bird(s)

Date of initial report ____/____/____

Name _____

Phone _____

Date dead bird(s) found or seen ____/____/____

Number of bird(s) seen _____

Species of bird(s) _____

Comments _____

Submit Specimen For Testing To

Please submit specimen to:

Washington Animal Disease Diagnostic Laboratory
Washington State University
Bustad Hall Room 155-N
Pullman, WA 99165-2037
(509) 335-9696

Only submit specimens that have been dead for less than 48 hours. Complete a reporting form for each specimen submitted. Additional questions contact Tom Gibbs of Washington State Department of Health at (360) 236-3060 or tom.gibbs@doh.wa.gov

st Information

Date Received for Testing ____/____/____

Date Tested ____/____/____

Specimen Type ☐ Blood ☐ Brain ☐ Tissue
☐ History ☐ Other _____

Test Method ☐ WNV Isolate ☐ Other _____

WNV Status ☐ Confirmed ☐ Probable ☐ Suspect
☐ Pending ☐ Negative ☐ Unsure

Results Value _____

Results Abnormal ☐ Yes ☐ No ☐ Unsure ☐ Pending

Lab Case Number _____

Testing Lab (other than Washington Animal Disease Diagnostic Laboratory)

Name _____

Address _____

City/State/Zip _____

Contact Person _____

Phone _____

Fax _____

Email _____

Comment _____
